**Halifax County Schools**

UNIT PLANNING TEMPLATE

UNIT: \_\_\_\_\_\_\_\_\_\_\_\_\_Water Cycle\_\_\_\_\_\_\_\_\_\_\_\_ TIME FRAME: \_\_\_\_\_\_\_\_\_2 weeks\_\_\_\_\_\_ TEACHER: Mr. Dongilli

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| |  | | --- | | **Unit Summary and Rationale:** | | Water is a vital resource and the water cycle shows how water is recycled through our environment. All of Earth's inhabitants including plants, humans, and animals require some kind of use of water. The water cycle is important to students because it shows one of the major cycles and is a great base to introduce many geological and biological concepts. Knowledge of the water cycle will help students better understand how the environment works. | | | | |
| |  | | --- | | **Unit Connection College and Career Ready Descriptions:** Teachers will select at least one of the following lenses to act as the overlay for the unit. These are the descriptors that must be included to ensure the unit is fully aligned to the CCLS and relevant to the college and career ready student.   Students will demonstrate independence.   Students will value evidence.   Students will build strong content knowledge.   Students will respond to the varying demands of audience, task, and discipline.   Students will critique as well as comprehend.   Students will use technology and digital media strategically and capably.   Students will develop an understanding of other perspectives and cultures. | | | | |
| |  | | --- | | **Unit Standards:**  **Essential Standard(s):** **5.E.1 - Understand weather patterns and phenomena, making connections to the weather in a particular place and time.** | | 5.P.2.1 – Explain how the sun’s energy impacts the processes of the water cycle (including evaporation, transpiration, condensation, precipitation, and runoff) | | | | |
| |  | | --- | | **Reading**  **(Including Foundational Skills)**   * RF.5.4. Read with sufficient accuracy and fluency to support comprehension.   + A. Read grade-level text with purpose and understanding. | | |  | | --- | | **Writing** |   W.5.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.  B. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic D. Use precise language and domain-specific vocabulary to inform about or explain the topic.  W.5.3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.  C. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. | |  | | --- | | **Speaking** |  * SL.5.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others’ ideas and expressing their own clearly.   + A. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.   + B. Follow agreed-upon rules for discussions and carry out assigned roles.   + C. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.   + D. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions. | |  |  | | --- | --- | | **Language/ Vocabulary** |  |  * L.5.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies.   + A. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.   C. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases. |

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| **Essential Questions:**   * Does the amount of water on Earth ever change? * How is water constantly recycled on Earth? * How does the ocean affect weather? * How can clouds help you predict the weather? | | | **Big Ideas:**  Earth Systems, Structures and Processes | | |
| **Learning Tasks:** Teachers list the various tasks students will engage in throughout the unit. | | | | | |
| **Reading Tasks**  [**http://www.sciencenewsforkids.org/2012/04/waters-worldwide-travels/**](http://www.sciencenewsforkids.org/2012/04/waters-worldwide-travels/)  Readers Theater:  <http://www.enchantedlearning.com/rt/weather/watercycle.shtml> | **Writing Tasks**  Each [student](http://www.ehow.com/info_8136612_projects-graders-do-water-cycle.html) should imagine he or she is a drop of water. Using notebook paper or a computer, the student should write a creative short story about his journey through the water cycle. The student's "journey" can start at any point of the water cycle, as long as the entire cycle is completed by the end of the story. While the story can be creative and include embellished details, the parts of the water cycle should remain factual. If the student wishes, she can include illustrations and turn the story into a book. | | **Experiments**  **The Water Cycle in parts**  **Evaporation Activities :**  **Part A**  [**http://www-k12.atmos.washington.edu/k12/pilot/water\_cycle/teacherpage.html**](http://www-k12.atmos.washington.edu/k12/pilot/water_cycle/teacherpage.html)  **Condensation**  **Part B**  [**http://www-k12.atmos.washington.edu/k12/pilot/water\_cycle/teacherpage.html**](http://www-k12.atmos.washington.edu/k12/pilot/water_cycle/teacherpage.html)  **Precipitation**  **Part C**  **Run-Off**  **Part D**  [**http://www-k12.atmos.washington.edu/k12/pilot/water\_cycle/teacherpage.html**](http://www-k12.atmos.washington.edu/k12/pilot/water_cycle/teacherpage.html)  **Kool-Aid Demonstration**  **Transpiration Activities**  [**http://gcuonline.georgian.edu/wootton/transpiration.htm**](http://gcuonline.georgian.edu/wootton/transpiration.htm)  **Water Cycle in Whole**  **Water Cycle Boggie Song/ UV beads**  **Part E**  [**http://www-k12.atmos.washington.edu/k12/pilot/water\_cycle/teacherpage.html**](http://www-k12.atmos.washington.edu/k12/pilot/water_cycle/teacherpage.html) | | **Language/Vocabulary Tasks**   * weather * climate * barometer * evaporation * condensation * rain gauge * precipitation * hygrometer * run-off * cumulus * stratus * cirrus * fronts * transpiration |
| **Assessments:** List types of assessments that will be used throughout the course of the unit.  \*If you do not have assessments for this unit, they should be created before moving on to the lesson design\* | | | | | |
| **DIAGNOSTIC** | | **FORMATIVE** | | **SUMMATIVE** | |
| **Teacher Made Test** | | **Graphic Organizer**  **http://www.curriculumonline.ie/uploadedfiles/JC/GG1.JPG**  **Exit Tickets-(KWL Chart)**  **Justified T/F for Water Cycle**  **Sciencenewsforkids Teacher Made Questions** | | **Teacher Made Unit Test** | |
| **Text(s) Selections** (generated by (?) both teacher and student)  Teachers will list the genres/titles for study: | | | | | |
| **Cross-Curricular Activities:**  **Math:** We will measure the amount of condensation coming off of different size bottles of frozen liquids at different times (15min/30min/1hr) | | | | | |